

REMARKS

At the outset, applicants would like to thank Examiner Minnifield for her time and consideration of the above-identified application at the interview of October 7, 2005 with Dr. Wahlgren and the undersigned attorney. At the interview, the issues raised in the outstanding Official Action and the amendment filed in response to the Official Action were discussed.

In the outstanding Official Action, claims 43, 45, and 48 were rejected under 35 USC §112, first paragraph, for allegedly failing to comply with the enablement requirement. However, as discussed at the interview and as reflected in the Interview Summary, it is noted that the non-narrowing amendment of September 19, 2005, wherein applicants do not disclaim any potential applications or utilities for the claimed invention, obviates this rejection. The amendment of September 19, 2005 amended claims 43 and 45 so that the term "pharmaceutical" was deleted from the claims. Claim 48 was canceled.

Thus, in view of the amendment filed on September 19, 2005, applicants believe that the pending claims satisfy the enablement requirement.

Claims 39, 42-46, 48, 52, 55, and 56 were rejected under 35 USC §102(b) as allegedly being anticipated by HELMBY et al. At the interview, this rejection was traversed.

The claimed polypeptide is directed to a plasmodium erythrocyte membrane protein (PfEMP1), whereas HELMBY et al. is

directed to the study of rosettins (now generally referred to as rifins by those skilled in the art).

At the interview, rosettins/rifins are distinct from PfEMP1 polypeptides. In support of applicants' position, it was respectfully brought to the Examiner's attention that rosettins/rifins do not contain the DBL-1 domain, nor do they bind to the negatively charged heparan sulfate and heparan sulfate-like molecule.

Applicants also directed the Examiner's attention to the Fernandez et al. article. A copy is attached with this amendment for the Examiner's convenience. In Fernandez et al., the PfEMP1 polypeptide was compared to several types of rosettins/rifins.

In particular, the Examiner's attention is respectfully directed to Figure 7 from Fernandez et al., which is also attached with this amendment. Applicants believe that Figure 7 shows that one of ordinary skill in the art would consider that the PfEMP1 polypeptide is considered distinct from a rosettin/rifin. Indeed, the rosettins/rifins are shown to be distinct from PfEMP1 polypeptides.

Furthermore, in Table 1 of Fernandez et al., the reactivity of Malaria Immune Serum with Trypsin-sensitive and Trypsin-resistant Antigens on the pRBC surface shows that PfEMP1 polypeptides and rosettins/rifins exhibit distinct

properties. A copy of Table 1 is also provided for the Examiner's convenience.

Applicants also brought to the Examiner's attention the article of Gardner et al. Gardener et al. sequence numerous rosettins/rifins. For the Examiner's convenience, a copy of the article is also attached with this amendment. Upon reviewing the Gardner et al. article, it is noted that the DBL-1 domain is not expressed in any of the sequenced rosettins/rifins by Gardner et al.

Thus, in view of the above, applicants respectfully submit that it is clear that PfEMP1 polypeptides are distinct from rosettins/rifins. As suggested by the Examiner at the interview, independent claims 39, 44, 46 and 55, 56 have been amended to emphasize that the PfEMP1 polypeptides are distinct from rosettins/rifins. As a result, it is believed that HELMBY et al. fail to anticipate or render obvious the claimed invention.

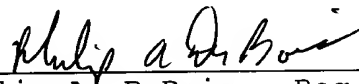
Thus, in view of the present amendment and the amendment of September 19, 2005, applicants respectfully submit that the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17

Respectfully submitted,

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PD/mjr

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APPENDIX:

The Appendix includes the following item(s):

- V. Fernandez et al., "Small, Clonally Variant Antigens Expressed on the Surface of the *Plasmodium falciparum*-infected Erythrocyte Are Encoded by the *rif* Gene Family and Are the Target of Human Immune Responses", J. Exp. Med., Vol. 190, No. 10, Nov. 15, 1999, pp. 1393-1403.
- Table 1 of Fernandez et al.
- Figure 7 of Fernandez et al.
- M. Gardner et al., "Chromosome 2 Sequence of the Human Malaria Parasite *Plasmodium falciparum*", Science, Vol. 282, Nov. 6, 1998, pp. 1126-1132.